

CHEMICALS OF MUTUAL CONCERN ANNEX

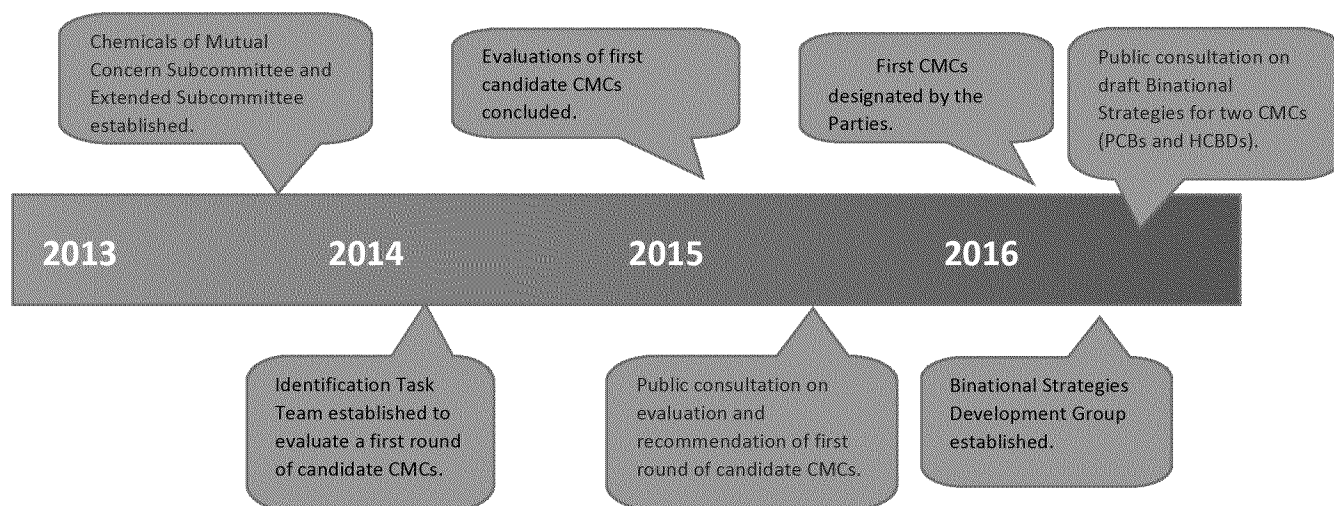
OVERVIEW

Due to the high population density and concentration of industrial activity in the Great Lakes region, as well as long-range atmospheric transport and deposition from out-of-basin sources and the long residence times of certain chemicals in the environment, chemical pollution has long been a serious concern in the Great Lakes. Certain chemicals can harm aquatic ecosystems and negatively impact habitats and biodiversity in the Great Lakes. Some chemicals are also persistent and can bioaccumulate in the food web, potentially exposing humans through fish consumption. As such, addressing the threats posed to the Great Lakes by chemicals in the environment has been a priority of Canada and the United States since the late 1970's.

The purpose of the Chemicals of Mutual Concern Annex is to contribute to the achievement of the general and specific objectives of the Agreement by protecting human health and the environment through cooperative and coordinated measures to reduce anthropogenic inputs of chemicals of mutual concern (CMCs) into the waters of the Great Lakes.

Under the Annex, the Parties have committed to identify CMCs on an ongoing basis and to take specific actions for CMCs, including the development of binational strategies, which may include pollution prevention, control and reduction actions as well as research, monitoring and/or surveillance activities.

PROGRESS TOWARD MEETING GLWQA COMMITMENTS



The implementation of this Annex is supported by the Chemicals of Mutual Concern Annex Subcommittee, co-led by Environment and Climate Change Canada and the United State Environmental Protection Agency, and supported by an Extended Subcommittee with representation from non-government organizations and industry. Organizations on the Subcommittee include: the Ontario Ministry of Environment and Climate Change (OMOEC), the Indiana Department of Environmental Management (IDEM), the Minnesota Department of Health (MDH), Wisconsin Department of Natural Resources (WDNR) and the Great Lakes Indian Fish and Wildlife Commission (GLIFWC) [logos to be

inserted].

BINATIONAL ACTIONS TAKEN

Pollution prevention and control of chemicals in Canada and the United States occurs through a number of programs and under different legislation at the federal, provincial, state and local levels. Recognizing this, the 2012 GLWQA focuses attention on those chemicals present in the Great Lakes, for which additional effort are warranted and can be advanced through binational coordination and cooperation.

Identifying chemicals of mutual concern that originate from anthropogenic sources, which are potentially harmful to human health or the environment.

- A series of criteria, the *Binational Considerations*, were developed to evaluate candidate CMCs. Using these criteria, a first round of candidate CMCs were evaluated, with detailed reports for eight candidate CMCs posted to binational.net for public input (<http://binational.net/2015/05/13/cmc-cand-pcspm/>) – the *Binational Considerations* can be found in Appendix A of each of these eight reports for candidate CMCs).
- Taking into consideration the information in the reports and input provided by the Chemicals of Mutual Concern Subcommittee, Extended Subcommittee, the Great Lakes Executive Committee and the public, on May 31, 2016, Canada and the United States designated the following eight chemicals as the first CMCs under the 2012 GLWQA:
 1. Mercury;
 2. Polychlorinated biphenyls (PCBs);
 3. Perfluorooctanoic acid (PFOA),
 4. Perfluorooctane sulfonate (PFOS),
 5. Long-chain perfluorinated carboxylic acids (LC-PFCAs);
 6. Polybrominated diphenyl ethers (PBDEs)
 7. Hexabromocyclododecane (HBCD); and,
 8. Short-chain chlorinated paraffins (SCCPs)
- To foster enhanced stakeholder engagement, the Parties created a process by which stakeholders, including non-government organizations, industry, academia and the public, can propose specific chemicals for consideration as potential candidate CMCs. A support document for the external nominations process is available on binational.net (<https://binational.net/2015/05/13/cmc-pro-pcspm/>), which describes the information to be submitted by stakeholders in support of a nomination.

Targeting these identified Chemicals of Mutual Concern for action.

- Draft *Binational Strategies*, which may include research, monitoring, surveillance and pollution prevention and control actions, are being developed for two CMCs, Polychlorinated Biphenyls (PCBs) and Hexabromocyclododecane (HBCD). Stakeholders, including the public, will contribute to the development binational strategies via specific input and review opportunities.

- The development of *Binational Strategies* for the remaining CMCs will take into account lessons-learned while developing the first two *Binational Strategies*.
- Existing relevant Canadian and United States environmental quality guidelines (including federal and provincial or state guidelines and other relevant criteria) for CMCs are being compiled and will be made available on binational.net, as Binational Strategies are developed. These guidelines can be considered in conjunction with other information (e.g., from state of the environment reporting) to evaluate progress towards the implementation of *Binational Strategies* for CMCs.

Coordinating science priorities, research, surveillance and monitoring activities, as appropriate related to CMCs.

- Through mechanisms such as the Cooperative Science and Monitoring Initiative under the Science Annex, monitoring of CMCs in relevant environmental media of the Great Lakes is being pursued in a collaborative and coordinated manner, whenever possible.
- Monitoring of CMCs supports the commitments of the Chemicals of Mutual Concern Annex, and is also critical for the development of the triennial State of the Great Lakes Indicators report, in which levels of these chemicals in the Great Lakes are reported.
- Canada and the United States have comprehensive national monitoring and surveillance programs, as well as regional, Great Lakes-specific programs and activities, which evaluate a broad suite of chemicals, including more recent chemicals of potential concern (e.g., organic flame retardants and perfluorinated chemicals).

DOMESTIC ACTIONS TAKEN



- The Government of Canada continues to assess and manage the risks posed by chemicals through its national Chemicals Management Plan. Under the Chemicals Management Plan, over 2,750 substances have been assessed, and 363 substances or groups of substances have been concluded to be toxic. For these toxic substances, 78 final risk management instruments have been established, and additional risk management instruments are being developed.
- All designated CMCs are listed under the Schedule 1 – List of Toxic Substances of the *Canadian Environmental Protection Act, 1999*. As such, all CMCs are subject to federal risk management in Canada, for example through the *Polychlorinated Biphenyl Regulations* and the *Prohibition of Certain Toxic Substance Regulations*. Additionally, Environment and Climate Change Canada has developed federal environmental quality guidelines and supported the development of

federal-provincial guidelines, for many of the first CMCs.

- Canada is a Party to many Multilateral Environmental Agreements aimed at globally addressing environmental and human health impacts of chemicals. Examples of relevant Multilateral Environmental Agreements include the Minamata Convention on Mercury and the Stockholm Convention on Persistent Organic Pollutants.
- Environment and Climate Change Canada also delivers a number of foundational water quality monitoring and surveillance activities in the Great Lakes watershed, including the Great Lakes Surveillance Program, the Great Lakes Fish Contaminant and Sediment Monitoring and Surveillance Programs, Canada Chemicals Management Plan Monitoring and Surveillance Program in the Great Lakes Basin, and the Great Lakes Connecting Channels Program, through which CMCs are currently being monitored in the Great Lakes.



- The United States Environmental Protection Agency delivers a number of foundational water quality monitoring and surveillance activities in the Great Lakes watershed, including the Great Lakes Fish Monitoring and Surveillance Program and the International Atmospheric Deposition Network.
- The Environmental Protection Agency also has funded, and continues to fund, research on the presence, effects, and trends of emerging chemicals, including CMCs, in a variety of media through the Great Lakes Restoration Initiative and its partners. As a result of the identification of hexabromocyclododecane (HBCD) as a CMC, it has been added to the routine monitoring program of the Agency's Great Lakes Fish Monitoring and Surveillance Program. These activities provide data and information to regulatory offices within the Environmental Protection Agency for consideration and incorporation into decision making processes.
- In the United States, CMCs are regulated under a combination of multiple federal, state and local statutes and regulations, depending on the source, use and release of the respective CMC. The Environmental Protection Agency generally addresses CMCs through the Toxic Substances Control Act, which seeks to address the human health and environmental impacts of chemicals in industrial use within the Great Lakes basin through a combination of voluntary and regulatory risk management activities. However, these risk management actions are taken at a national level, focusing on specific substances and their specific uses in commerce.
- As implementation of the Chemicals of Mutual Concern Annex proceeds toward the development of Binational Strategies and ensuing actions, the United States will seek to more closely align its actions at the federal, state and local levels to better support CMC-oriented actions that are specific to the Great Lakes basin, as appropriate.